

CHAPTER 9

ENVIRONMENTAL HEALTH DEPARTMENT

STANDARD OPERATING PROCEDURE

500 BED FLEET HOSPITAL

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500 BED FLEET HOSPITAL
STANDARD OPERATING PROCEDURES
ENVIRONMENTAL HEALTH DEPARTMENT

A. **MISSION:** Responsible for the preservation of health, safety and operational effectiveness of the staff and patients.

B. **FUNCTIONS:**

1. Communicable Disease Control.
2. Operational/Field Sanitation.
3. Food Sanitation.
4. Waste Disposal.
5. Vector Control.
6. Water Quality Assurance.
7. Medical Intelligence.
8. Habitability.
9. Sanitation.
10. Optional.
 - (a) Personal hygiene.
 - (b) Mass immunization.
 - (c) Safety - storage of chemicals.
 - (d) Infection control.
 - (e) Hearing conservation.
 - (f) Decontamination (CBR).

C. **PHYSICAL DESCRIPTION:**

1. Location within complex:
2. Sheltering.

Type:	An 18'52' general purpose tent.
Quantity:	An office within a general purpose tent.
3. Material:

IOL:

PMTO

D. **SPECIAL CONSIDERATIONS:**

1. Standard ISO containers will be used for all garbage collection.
2. Water supply decentralized throughout hospital.
3. Hospital in temporary structures.

E. **WORKLOAD:** N/A.

F. **ORGANIZATION:**

1. Responsibility. The Head, Environmental Health Department, who reports to the Director, Medical Services, is assigned overall management responsibility

2. Organizational Chart.

Director, Medical Services

(1) 0-3 Head, Environmental Health

(1) E-7 Preventive Medicine Tech Supervisor

(1) E-5 Preventive Medicine Tech

3. Staffing.

(a) Criteria: None.

(b) Staffing Pattern: Two 12 hour watches.

<u>Personnel</u>	<u>AM Watch</u>	<u>Night Watch</u>	<u>Total Assigned</u>
Head, Environmental Health	1(0-3)	-	1
Preventive Medicine Tech	1(E-6)	1(E-5)	2

4. Assignments by Billet Sequence See TAB A, page 13. Number:

5. Watch Bill: See TAB B, page 14.

6. Special Watches: N/A.

G. **TASKS:**

<u>Tasks</u>	<u>Methods</u>
1.INSPECT FOODSERVICE FACILITIES	1.1 Conduct daily walk- through survey of food service spaces and document in Environmental Health Log (TAB C-1).

- 1.2 Inspect foodservice facilities, twice per month, using NAVMED 6240/1 (TAB F-1). Submit report to Commanding Officer in accordance with Chapter 1, Section IX, NAVMED P-5010.
- 2. INSPECT FOOD ITEMS
 - 2.1 Inspect food items for fitness for human consumption in accordance with NAVMED P-5010, Chapter 1.
 - 2.1A If the fitness of any food appears questionable.
 - 2.1B When advised by the food service officer that food items are purchased on the local market.
 - 2.1C At request of foodservice officer for food items purchased under a contract which require inspection at destination.
 - 2.2 Coordinate actions as follows with appropriate entries in the Environmental Health Log (TAB C-1).
 - 2.2A Approve item for consumption.
 - 2.2B Declare unfit for human consumption.
 - 2.2C Submit sample of the item for laboratory analysis where appropriate to one of the Navy Environmental and Preventive Medicine Units listed in Article 1-46(3) to NAVMED P-5010 or the Food Microbiology Division of the Army medical laboratories listed in NAVSUP PUB 486, Vol. 1, Article 4002.
 - 2.2D Ensure that Food Service Officer is advised that food items must be destroyed.
 - 2.3 Inspect for assurance that food items are received from approved sources.
 - 2.4 Track unsatisfactory food items - hazardous materials. Refer to 1-6(1) NAVMED P-5010.
 - 2.4A Priority message to Defense Personnel Support Center, Philadelphia.
 - 2.4B Suspend issue and use of all suspected items pending further instructions from DPSC.

- 2.4C Determine if stocks present an immediate health or safety hazard.
- 2.4D Stocks will not be destroyed unless they cannot be effectively segregated and/or present an immediate health or safety hazard.
- 2.4E Submit samples for laboratory analysis where appropriate (see NAVSUP PUB 486, Vol. I, Article 4002). Also, refer to NAVSUPINST 10110.8.
- 2.5 Track unsatisfactory-nonhazardous food items
 - 2.5.A Reported by Foodservice Officer on DD Form 1608 - Unsatisfactory Material Report (Subsistence). Refer to 1-6(2) NAVMED P-5010.
 - 2.5.B Submit samples when feasible for laboratory analysis. (See Article 1-5(6) NAVMED P-5010 and NAVSUP PUB 486, Vol. I Article 4002.)
- 2.6 Upon receipt of an ALFOODACT message from Defense Personnel Support Center, coordinate with the accountable/responsible personnel as necessary for the suspect items to be:
 - 2.6A Identified.
 - 2.6B Segregated.
 - 2.6C Placed in "Medical Hold Status." Refer to NAVSUPINST 10110.8 (G-2) and NAVSUP PUB 486, Volume 1, Article 4002.
- 3. CONDUCT FOODSERVICE SANITATION TRAINING/SCREENING
 - 3.1 Provide initial foodservice screening exam for all food service personnel with appropriate records on Form SF-600 in the Health Record.
 - 3.2 Provide foodservice sanitation training as required in accordance with SECNAVINST 4061.1.
- 4. COMMUNICABLE DISEASE CONTROL
 - 4.1 Monitor for communicable disease and document actions in the Environmental Health Log (TAB C-1) and patient follow-up in the Communicable Disease Log (TAB C-2) or Sexually Transmitted Disease Log (TAB C-3) as follows:

- 4.2 Monitor daily the Admission and Disposition Log (See Chapter 28) in the Patient Administration Office for communicable diseases. Refer to BUMEDINST 6220.3.
 - 4.3 Monitor lab reports for communicable disease.
 - 4.4 Monitor disease rates and compare with pre-deployment expected levels for communicable diseases in the area of deployment and report to higher appropriate.
 - 4.5 Monitor compliance and effectiveness of prophylaxis programs of the hospital staff and patients where required.
 - 4.6 Perform patient interviews, as required.
 - 4.7 Prepare venereal disease epidemiologic report (TAB F-3) as required. Maintain Sexually Transmitted Disease Log (TAB C-3)
 - 4.8 Prepare disease alert report for communicable disease as required. Refer to BUMEDINST 6220.3.
 - 4.9 Assist in development of protocol as required for treatment, isolation, etc.
5. SUPPORT OCCUPATIONAL SAFETY AND HEALTH
- 5.1 Provide support in the area of Occupational Safety and Health as required, i.e., WBGT for heat stress.
 - 5.2 Cold temperature (below 50°F/10°C).
 - 5.2A Provide guidance on wear/drying of clothing/footwear.
 - 5.2B Provide guidance on prevention of trench foot, immersion foot, frost bite, snow blindness and carbon monoxide poisoning.
 - 5.3 Hot temperature (Wet Bulb Globe Temperature Index (WBGT) over 85).
 - 5.3A Obtain WBGT daily.
 - 5.3B Provide guidance for troops on cause and prevention of heat exhaustion, heat stroke, heat cramps, sunburn, prickly heat and fungus infections.

6. CONDUCT WATER
SURVEILLANCE AND
INSPECTION PROGRAM

- 6.1 Monitor first filling of bladders, tankers, etc. to ensure appropriate FAC PPM control time and FAC PPM after contact is IAW P-5000, Chapters 5 and 6.
- 6.2 Complete the following surveys and inspections of the water distribution system. Document in the Environmental Health Log (TAB C-1) or the Water Log (TAB C-4) as appropriate.
- 6.3 Take a minimum of one (1) sample daily from each potable water system to check for chlorine levels in conformance with Article 5-32 NAVMED P-5010. See TAB E-6 for location.
- 6.3A Take immediate action to eliminate inadequate or excessive chlorine levels.
- 6.4 Take one (1) sample weekly from each potable water system and ice machine for bacteriological analysis. See TAB C-6 for schedule and location.
- 6.4A When positive samples are found, ensure that immediate and active efforts are taken to treat the water.
- 6.4B Take daily samples following a bacteriologically unsatisfactory sample as provided in Article 5-32(3)(b) of NAVMED P-5010.
- 6.5 Verify or coordinate initial chemical constituent analysis of water supply. Refer Article 5-32(5) of NAVMED P-5010.
- 6.6 Conduct weekly inspection of water distribution system for potential cross contamination.
- 6.7 Receives notification of all work performed on the water storage and distribution system, and ensures proper disinfection and testing of water after a significant disruption of service. Refer to Article 5-5 NAVMED P-5010.
- 6.8 Ensure that proper water transfer methods from tankers to bladders are being employed.

7. MONITOR SEWAGE SYSTEM

- 7.1 Monitor sewage system as follows and document in the Environmental Health Log (TAB C-1).

- 7.2 Conduct weekly visual inspection of the sewage system for leaks.
- 7.3 Oversee clean-ups and disinfection of foodservice spaces, living areas and medical spaces in the case of major sewage leaks or spill in accordance with Article 713 of NAVMED P-5010.
- 8. CONDUCT HABITABILITY INSPECTIONS
 - 8.1 Inspect for habitability in accordance with NAVMED P-5010, Chapter 2 as follows and submit summary report to Commanding Officer:
 - 8.2 Inspect living and berthing areas at least weekly.
 - 8.3 Inspect laundry areas weekly.
 - 8.4 Inspect barbershop bi-weekly.
- 9. VECTOR CONTROL & ABATEMENT
 - 9.1 Inspect, evaluate and act as required to control vectors in the Fleet Hospital. Document appropriately in the Vector Control Log (TAB C-5).
 - 9.2 Inspect and survey at least 3 times weekly to determine the species, source, location and density of vectors and submit report to CO.
 - 9.3 Submit recommendations to CO as required relating to sanitation standards and practices affecting the presence and abundance of vectors and utilization of vector control methods.
 - 9.4 Establish and implement a vector control plan as necessary and document actions, i.e., spraying, traps, etc., in Vector Control Log (TAB C-5).
 - 9.5 Evaluate effectiveness of vector control measures weekly and document in the Vector Control Log. Also, monitor incidence of vector borne diseases.
 - 9.6 Inspect weekly to ensure that pesticides are used safely and document in the Vector Control Log.
 - 9.7 Ensure the safe storage and handling of pesticides and document weekly in the vector control log.

- 9.8 Disseminate information, as required, on all appropriate personal protective measures against vectors.
- 9.9 Collect and prepare specimens as required in accordance with NAVMED P-5010 paragraph 8-56.
- 9.10 Maintain vector control equipment to ensure proper and safe operation.
- 10. PERFORM LOGISTICAL FUNCTIONS
 - 10.1 Ensure that adequate levels of supplies are identified and on hand.
 - 10.1A Identify working levels of supplies.
 - 10.1B Accomplish request/ requisitions/return functions IAW with Chapter 14.
 - 10.1C Ensure that supplies on hand do not exceed identified levels under normal circumstances.
 - 10.1D File copies of supply documents.
 - 10.2 Store supplies properly.
 - 10.2A Maintain equipment accountability at all times.
 - 10.3 Perform operator maintenance for all equipment IAW with manufacturer's instructions.
 - 10.4 Report maintenance requirements not specified as operator maintenance to general or medical maintenance personnel.
 - 10.4A Maintain appropriate records.
- H. **STANDARD OPERATING PROCEDURES:** SEE TAB C, page 15.
- I. **CLINICAL POLICIES/GUIDELINES:** N/A.
- J. **STANDARDS AND JOB DESCRIPTIONS:** SEE TAB D, page 29.
- K. **DOCUMENTATION:**
 - 1. Reference SEE TAB E, page 32.
 - 2. Forms SEE TAB F, page 33.

TAB A

ASSIGNMENTS BY BILLET SEQUENCE CODE

Department: ENVIRONMENTAL HEALTH DEPARTMENT.

<u>Billet Number</u>	<u>Title</u>	<u>Designator/ Specialty Code</u>	<u>Rank/ Rate</u>
48029	HEAD, ENVIRONMENTAL HEALTH	2300/0861	O-3
48019	PREV MED TECH SUPV	8432/HM	E-7
48039	PREV MED TECH	8432/HM	E-5

TAB B

WATCH BILL FOR ENVIRONMENTAL HEALTH DEPT

Billet	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
48029	*A	A	*A	*A	*A	A	D	N	N	N	N	N	N	E	*A	*A	A	*A	*A	*A	E
48019	A	A	A	A	A	*A	*A	*A	*A	*A	*A	E	N	N	N	N	N	N	E	D	A
48039	N	N	N	N	N	N	E	D	A	A	A	A	A	A	A	A	A	A	N	N	N

KEY:

A = AM watch, 0700-1900.
 N = Night watch, 1900-0700.
 E = Excused.
 D = Duty.
 * = Call.

TAB C

STANDARD OPERATING PROCEDURES INDEX

<u>NUMBER</u>	<u>TITLE</u>	<u>PAGE</u>
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TAB C-1

ENVIRONMENTAL HEALTH LOG

A. **PURPOSE:** To provide a sequential, chronological and legal record of environmental health program activity associated with the Fleet Hospital.

B. **DEFINITION:** A hard-bound log (record book) containing the minimum essential information required to identify activities, findings and results not otherwise recorded on required reports and records.

C. **EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:**

Standard record book.

D. **CRITERIA:**

1. Log must be updated frequently to ensure that an accurate and detailed record of environmental health program activity is available.

2. At a minimum, it will be updated before the Environmental Health watch-stander is relieved.

E. **STEPS:**

1. The front cover must be marked with the Fleet Hospital Unit Identification Code (UIC), the title "Environmental Health Log," and the date of initial entry.

2. Each set of facing pages will be divided into vertical columns. Columns will be labeled "Date", "Activity", "Findings", and "Action Taken." (See format TAB J-3).

3. The log will be closed at 2400 each day by drawing a double horizontal line beneath the last entry.

4. When the log is full, it will be closed by marking the date of the last entry on the front cover.

F. **RESPONSIBILITY:**

Environmental Health watch-stander.

TAB C-2

COMMUNICABLE DISEASE LOG

A. **PURPOSE:** To provide a sequential, chronological and legal record of communicable disease monitoring at the Fleet Hospital.

B. **DEFINITION:** A hard-bound log (record book) containing the minimum essential information required to identify patients with communicable diseases.

C. **EQUIPMENT, SUPPLIES AND FORMS REQUIRED:**

Standard record book.

D. **CRITERIA:**

1. Log must be updated frequently to ensure that an accurate and detailed record of patients with communicable diseases is available.

2. At a minimum, it will be updated before the Environmental Health watch-stander is relieved.

E. **STEPS:**

1. The front cover must be marked with the Fleet Hospital Unit Identification Code (UIC), the title "Communicable Disease Log," and the date of initial entry.

2. Each set of facing pages will be divided into vertical columns. Columns will be labeled "Date", "Case #", "Disease", "IDCA", "Patient Name", "SSN", "Organization", "Disposition", "DAR", and "Patient Contact Interview", "NOSOCOMIAL", "Job Related". (See format TAB J-4.)

3. The log will be closed at 2400 each day by drawing a double horizontal line beneath the last entry.

4. When the log is full, it will be closed by marking the date of the last entry on the front cover.

F. **RESPONSIBILITY:**

Environmental Health watch-stander.

TAB C-3

SEXUALLY TRANSMITTED DISEASE (STD) LOG

A. **PURPOSE:** To provide a sequential, chronological and legal record of patients seen for sexually transmitted disease at the Fleet Hospital.

B. **DEFINITION:** A hard-bound log (record book) containing the minimum essential information required to identify patients, disease types, and results of treatment.

C. **EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:**

Standard record book.

D. **CRITERIA:**

1. Log must be updated frequently to ensure that an accurate and detailed record of patients with sexually transmitted disease is available.

2. At a minimum, it will be updated at the completion of patient contact interviews every day.

E. **STEPS:**

1. The front cover must be marked with the Fleet Hospital unit identification code (UIC), the title "Sexually Transmitted Disease Log," and the date of initial entry.

2. Each set of facing pages will be divided into vertical columns. Columns will be labeled "Date", "Last 4 SSN", "Organization", "Type", "Return", "Remarks". (See format TAB J-5.)

3. When the log is full, it will be closed by marking the date of the last entry on the cover.

F. **RESPONSIBILITY:**

Patient contact interviewer.

TAB C-4
WATER LOG

A. **PURPOSE:** To provide a sequential, chronological and legal record of water sampling and bacteriological results at the Fleet Hospital.

B. **DEFINITION:** A hard-bound log (record book) containing the minimum essential information required to identify water samples and results from all sources and locations.

C. **EQUIPMENT, SUPPLIES AND FORMS REQUIRED:**

Standard record book.

D. **CRITERIA:**

1. Log must be updated frequently to ensure that an accurate and detailed record of water sampling and results is available.

2. At a minimum, it will be updated before the environmental health watchstander is relieved.

E. **STEPS:**

1. The front cover must be marked with the Fleet Hospital Unit Identification Code (UIC), the title "Water Log" and the date of initial entry.

2. Each set of facing pages will be divided into vertical columns. Columns will be labeled "Date," "Sample Site", "Sample By", "Time of Day", "CL Level", "Bacterial Results" (if applicable) and "Remarks/Action". (See format TAB J-6.)

3. The log will be closed at 2400 each day by drawing a double horizontal line beneath the last entry.

4. When the log is full, it will be closed by marking the date of the last entry on the cover.

F. **RESPONSIBILITY:**

Environmental Health watchstander.

TAB C-5

VECTOR CONTROL LOG

A. **PURPOSE:** To provide a sequential, chronological and legal record of vector control activity associated with the Fleet Hospital.

B. **DEFINITION:** A hard-bound log (record book) containing the minimum essential information required to identify vector control problems, actions, and results.

C. **EQUIPMENT, SUPPLIES AND FORMS REQUIRED:**

1. Standard record book.

D. **CRITERIA:**

1. Log must be updated frequently to ensure that an accurate and detailed record of vector control activity is available.

2. At a minimum, it will be updated before the Environmental Health watchstander is relieved.

E. **STEPS:**

1. The front cover must be marked with the Fleet Hospital Unit Identification Code (UIC), the title "Vector Control Log" and the date of initial entry.

2. Each set of facing pages will be divided into vertical columns. Columns will be labeled "Date", "Location", "Origin (Trouble Call/Complaint)", "Problem", "Action", and "Results". (See format TAB J-7.)

3. When the log is full, it will be closed by marking the date of the last entry on the front cover.

F. **RESPONSIBILITY:**

1. Environmental Health watchstander.

TAB C-6

**WATER SAMPLE SCHEDULE
BACTERIOLOGICAL SAMPLE SCHEDULE**

POTABLE WATER SYSTEM CO	SAMPLE SITES	<u>SUN</u>	<u>MON</u>	<u>TUES</u>	<u>WED</u>	<u>THUR</u>	<u>FRI</u>	<u>SAT</u>
1	H-1	X						
2	H-2		X					
3	CWS1			X				
4	CWS2				X			
5	CSR1					X		
6	CWS3	X						
7	CWS4		X					
8	CWS6			X				
9	ICU				X			
10	CWS7					X		
11	CWS8	X						
12	H-3		X					
13	LAUNDRY 1			X				
14	LAUNDRY 2				X			
15	LAUNDRY 3					X		
16	H-4	X						
17	H-5		X					
18	DINING HALL				X			
19	H-6					X		
20	H-7						X	
21	H-8		X					
22	H-9			X				
23	H-10				X			
24	H-11							X
25	H-12							X
26	A/C Plant	X						
27	Not required							
28	Not required							
ICE MACHINE								
WARD 1			X					
WARD 2				X				
WARD 3						X		
WARD 4							X	
WARD 5							X	
WARD 6								X
WARD 7								X
WARD 8								X
WARD 9								X
FOOD SERVICE 1								X
FOOD SERVICE 2								X

TAB C-7

MAINTENANCE OF GENERAL FILES

- A. **PURPOSE:** To provide a system for maintaining general files.
- B. **DEFINITION:** N/A.
- C. **EQUIPMENT, SUPPLIES AND FORMS REQUIRED:** N/A.
- D. **CRITERIA:**
1. Forms are filed in sequence - file number and chronological order.
 2. Documents are easily retrievable.
- E. **STEPS:**
1. The senior enlisted person will:
 - (a) Assure all correspondence, message traffic and other files are maintained IAW SECNAVINST 5210.11C, Standard Subject Identification Codes.
 - (b) Maintain any other file as directed by Head, Environmental Health Department.
 2. At a minimum, the file will contain:
 - (a) Departmental logs.
 - (b) Maintenance requests.
 - (c) Supply requests.
 - (d) Watch bills.
 - (e) Notices/Instructions.
- F. **RESPONSIBILITY:**
- Senior HM.

TAB C-8

HAZARDOUS WASTE

A. **PURPOSE:** To provide guidance for the collection, handling and disposal of hospital generated wastes which have contacted living organisms or may otherwise be considered infectious or hazardous.

B. **DEFINITION:**

1. Background: The operation of health care facilities creates waste materials, some of which are hazardous. A subset of hazardous waste is infectious waste; proper handling of infectious waste is mandatory, to prevent spread of infectious diseases. The methods of handling infectious waste, from its generation to its ultimate disposal, must be adhered to strictly by all hands, without exception.

2. Relationship with Host Nations: It is anticipated that the hospital will be operating, in a wartime or conflict mode, on foreign soil. Close liaison with force planners during the pre-deployment planning phase is essential for the hospital command to determine host nation requirements for handling, storage and disposal of infectious hazardous wastes. Whenever possible, agreements and/or contracts with host nations should be secured for the incineration or sanitary burial of wastes in accordance with the host nation's regulations. During peacetime exercises on U.S. soil, adherence to federal, state and local environmental laws and regulations, partially listed in Appendix A, shall be strictly enforced.

3. Categories of Hospital Generated Waste: It must be clearly understood that the field hospital will generate four distinct categories of waste. Each type will require special handling procedures from generation to disposal. These categories are:

(a) Infectious waste - generated in patient contact, laboratory and surgical areas.

(b) Hazardous waste - usually chemical in nature and generated in the Laboratory, X-ray and Public Works department.

(c) Infectious hazardous waste - generated in the laboratory.

(d) Non-infectious waste - generated in all areas of the hospital.

4. Definitions.

(a) Infectious waste is defined as waste originating from the diagnosis and treatment of people. There are five (5) broad categories of infectious waste recognized by the Centers for Disease Control (CDC): microbiological, blood and blood products, pathological, sharps, and isolation waste. Examples of each of these types include, but are not necessarily limited to, the following:

(1) Microbiological - wastes generated in laboratories

processing bacterial, fungal, mycobacterial, or viral materials, such as media-containing plates, tubes, or diagnostic strips; swabs; glass slides; pipettes. Live virus vaccines (including smallpox, yellow fever, rubella, measles, mumps, polio, and adenovirus) and any of the associated equipment for their use also fall into this classification.

(2) Blood and blood products - wastes generated in the collection processing, and use of blood and blood products; tubes for diagnostic blood collection; items and materials contaminated with blood or blood products that are not designed for cleaning, resterilization, and reuse.

(3) Pathological - pathologic specimens, body tissues, contaminated disposable instruments, and laboratory waste generated in the performance of medical treatment procedures and diagnostic laboratory testing.

(4) Sharps - any diagnostic or therapeutic item possessing a surface capable of piercing human skin, not designed for cleaning, resterilization, and reuse. Examples would include needles for injections, preparation of intravenous medicinals, indwelling cannulae, and diagnostic testing (e.g., lumbar puncture, thoracentesis, paracentesis, etc.); scalpels; and other disposable instruments with a surface capable of piercing human skin.

(5) Isolation waste - wastes generated in the therapy of patients on isolation precautions. Examples would include gowns; gloves; masks; head covers; dressings; disposables basins; paper towels used in isolation rooms; and other such items and materials used in the care of isolation patients that are not designed for cleaning, resterilization, and reuse.

(b) Fomites - an object or item that is not of itself harmful, but may harbor pathogenic microorganisms and serve as a vehicle in the transmission of infections. Examples would include but are not limited to bedding, linen, cloth towels and washrags, diagnostic medical instruments (e.g., stethoscopes, sphygmomanometers, thermometers), and personal items (e.g., razors, toothbrushes, toiletries).

(c) Hazardous waste - any wastes, or combination of wastes, which because of its quantity, concentration, physical or chemical properties may pose a substantial present or potential threat to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

(d) Infectious hazardous waste - any combination of materials and agents that meet the definitions described in 2-4.a. and 2-4.c. above. These wastes will typically be generated in the laboratory when organic pathogens are combined with hazardous chemicals or reagents.

(e) Non-infectious waste - waste generated from non-clinical spaces and waste from patients and their related procedures, where no infection or contagious disease exists.

(f) Storage - the holding of infectious hazardous waste for a temporary period, at the end of which the waste is treated, disposed of,

or stored elsewhere.

(g) Treatment - any method, technique, or process designed to change the chemical, physical, or biological characteristics of any infectious hazardous waste so as to render such waste nonhazardous, or less hazardous or safer for transportation, storage or disposal.

(h) Autoclave - an apparatus using steam under pressure for sterilizing medical equipment.

C. **EQUIPMENT, SUPPLIES, AND FORMS REQUIRED:** N/A.

D. **CRITERIA:**

Hazardous waste is properly handled and disposed.

E. **STEPS:**

1. Handling.

(a) Infectious and infectious hazardous waste.

(1) Ward and laboratory personnel shall utilize personal protective clothing and procedures which would normally be practiced in a traditional health care setting for the control of the spread of disease.

(2) Personnel shall wear disposable gloves, gowns, and shoe and hair covers.

(3) Patient contact and laboratory areas will utilize clearly marked, impervious, containers for the disposal of all sharps. When full, the sharps container shall be securely closed with autoclave tape.

(4) Patient areas will utilize clearly marked containers lined with double plastic bags, the outer bag being an orange autoclavable "biological hazard" bag. These containers will be separate from non-infectious "trash" containers. When full, the inner bag will be sealed with autoclave tape. The outer bag will be sealed with filament reinforced tape and autoclave tape.

(b) Hazardous waste.

(1) Protective equipment, as described in DHHS (NIOSH) Publication No. 81-123 (see Appendix A), will be utilized by personnel handling hazardous waste.

(2) All hazardous waste will be containerized. Ideally, in the original container or containers designed for the collection of such wastes such as those provided with automated laboratory equipment.

(3) Containerized and transporting to storage areas will be accomplished by the waste generator (i.e., lab, x-ray, public works, etc.).

2. Transport and storage.

(a) Infectious waste.

(1) Ward personnel will deliver properly sealed sharps containers and double bagged infectious waste, to the laboratory temporary holding area, on a regularly scheduled basis. Ideally, this area will be one of low traffic and prohibitive to patient care, smoking, eating, and food or medicinal handling.

(2) Ideally, ward personnel will store and transport multiple bags of infectious waste in large, covered containers (i.e., "GI" cans with tight fitting lids). These containers shall be scrubbed with a germicidal solution at least once per shift or more often if grossly contaminated.

(3) Laboratory personnel will handle and routinely autoclave waste under steam pressure for a minimum of fifteen (15) minutes. After proper autoclaving, these wastes may be handled as noninfectious depending on host nation requirements.

(b) Hazardous waste.

(1) As noted in paragraphs 3-1 b.2, hazardous waste will be stored in their original containers or those designed for collection of such wastes.

(2) Waste generating personnel will containerize waste according to its chemical grouping such as lubricants, fuels, acids, alkalines, chlorinated hydrocarbons, etc. Containers will be tightly sealed and labeled.

(3) Storage areas will be at least 100 yards from the hospital compound and actual or potential potable water sources. Ideally, these areas will be elevated with natural drainage away from the hospital and water sources. Waste containers should be protected from the elements and the area clearly marked as "Hazardous Waste Storage."

3. Disposal.

(a) General. It must be understood that, in an operational situation, the methods of waste disposal range from ideal to undesirable. The following disposal methods are intended to guide the hospital command towards utilization of the best disposal method for any given situation.

(1) Host Nation Agreement - Under the Status of Forces Agreement the cognizant Commander-in-Chief (CINC) will negotiate with the host country for disposal services.

(2) The cognizant CINC will provide disposal services utilizing established logistical support channels within the theater of operations such as the Supply Battalion of the Force Service Support Group, or supply ships.

(b) Methods. In the absence of the preferred, above mentioned disposal methods, the following may be utilized.

(1) Nonhazardous/noninfectious waste (including properly autoclaved infectious waste).

a Burial in a pit as deep as organic equipment will allow and covered with at least two feet of earth. Burial pits should be at least 100 yards from the hospital compound and potable water sources.

b Burning by mixing with fuel oil until only ash remains. Ash should then be buried as above. Tactical consideration must be given to open burning as smoke may give away the hospitals location.

(2) Hazardous waste.

a Laboratory chemical waste which contains infectious, organic matter, is to be treated as hazardous as autoclaving of liquids in closed containers is not authorized.

b Burial in sealed, marked containers, as deep as organic equipment will permit. Burial sites should be lined with plastic sheeting, covered with at least four feet of earth and conspicuously marked. Sites should be at least 100 yards from the hospital compound and potable water sources.

F. **RESPONSIBILITY:**

1. The Commanding Officer is responsible for ensuring the proper management of the overall infectious and hazardous waste program and to interface with the host nation to ensure local regulations are satisfied.

2. Nursing Service via the clinical staff is responsible for the handling of all wastes generated in clinical spaces. This includes ensuring that adequate supplies of hampers, bags, tapes, sharps containers, and protective clothing are maintained in these spaces.

3. Laboratory Service is responsible for handling hazardous infectious wastes once it is delivered to or generated by the laboratory. The service is also responsible for proper autoclaving of such wastes to render it free from pathogens.

4. Surgical Service is responsible for handling wastes generated within the operating room giving special attention to surgically removed human tissue.

5. Operating Management is responsible for the removal of waste from the central collection points, including the laboratory, and delivery to the designated pickup area such as the "back loading dock."

6. Public Works Department is responsible for the removal of wastes from the hospital compound and ensuring its proper disposal as outlined in this SOP.

TAB-D

STANDARDS AND JOB DESCRIPTIONS INDEX

<u>NUMBER</u>	<u>TITLE</u>	<u>PAGE</u>
D-1	Job Description, Head, Environmental Health	30
D-2	Job Description, Preventive Medicine Technician	31

TAB D-1

HEAD, ENVIRONMENTAL HEALTH JOB DESCRIPTION

The Head, Environmental Health is responsible and accountable for the management of all functions and services performed by the Environmental Health Department. The Department Head must direct, assist, orient, and instruct preventive medicine personnel and hospital staff in the principles, procedures, and safety procedures employed in the Environmental Health Department.

SPECIFICALLY THE DEPARTMENT HEAD WILL:

1. Supervise, schedule and coordinate activities of departmental personnel.
2. Direct orientation and training of personnel assigned to the Environmental Health Department.
3. Coordinate workload requirements to ensure maximum and effective utilization of assigned personnel.
4. Interpret and administer hospital policies and procedures applicable to environmental health.
5. Ensure compliance with administrative and managerial procedures contained in hospital instructions.
6. Develop and prepare reports in final form.
7. Prepare work schedule/watch bills as required.

TAB D-2

PREVENTIVE MEDICINE TECHNICIAN JOB DESCRIPTION

1. Ensure that all assigned tasks are properly completed and safety standards are met.
2. Maintain high standards of personal hygiene and conduct.
3. Maintain clean spaces.
4. Check and maintain daily availability of equipment and supplies and submit requisitions as required.
5. Ensure that all logs have been completed correctly.
6. Report to and obtain assistance from the Head, Environmental Health as needed.
7. Pass word to oncoming watch.
8. Perform other duties as assigned.

TAB E
REFERENCES INDEX

<u>NUMBER</u>	<u>TITLE</u>
E-1	NAVMED P-5010; Manual of Naval Preventive Medicine
E-2	NAVSUPINST 10110.8 DOD Hazardous Food and Non-Prescription Drug Recall System
E-3	NAVSUP PUB 486 Vol 1 Food Service Management - Enlisted Dining Facilities
E-4	SECNAVINST 4061.1 Food Sanitation Training Programs
E-5	BUMEDINST 6220.3 Disease Alert Reports

TAB F
FORMS INDEX

<u>NUMBER</u>	<u>FORM NUMBER</u>	<u>FORM TITLE</u>	<u>PAGE</u>
F-1	NAVMED 6240/1	Food Service Sanitation Inspection	
F-2	CDC 92936	Venereal Disease Epidemiologic Report	
F-3		Environmental Health Log Format	34
F-4		Communicable Disease Format	36
F-5		Sexually Transmitted Log Format	38
F-6		Water Log Format	40
F-7		Vector Control Log Format	42
F-8		Evacuation Flow Chart	
F-9	DD 599	Patients Effect Storage Tag	
F-10	NAVMED 6010/8	Patients Valuables Envelope	

TAB F-3

ENVIRONMENTAL HEALTH LOG FORMAT

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TAB F-3

ENVIRONMENTAL HEALTH LOG FORMAT

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ACTION TAKEN

DISPOSITION RELATED	DAR	PATIENT INTERVIEW	NONSOCOMIAL	JOB
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TAB F-6

WATER LOG FORMAT

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